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EXAMINER

LE, TUAN H

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/506,453	Applicant(s) ENDO ET AL.	
	Examiner TUAN H. LE	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 34 recites the limitation "the resource file" in line 3. There is insufficient antecedent basis for this limitation in the claim. As a result, for examining purposes "the resource file" is considered to be "the received file".

Claim 35 recites the limitation "the resource file" in line 3. There is insufficient antecedent basis for this limitation in the claim. As a result, for examining purposes "the resource file" is considered to be "the received file".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 4, 6, 7, 9-11, and 15-17 are rejected under 35 U.S.C. 102 (b) as being anticipated by Honna (US 6,304,313).

Regarding **claim 4**, Honna discloses an image source unit being connected to an image output unit through a communication interface, comprising:

request command generation means (printer driver 115) for generating a request command for requesting said image output unit to perform image output operation based on predetermined output condition setting (Honna, Fig.1 and column 10 line 12-25, wherein printer drive is used);

resource file creation means (cpu 117) for creating a resource file used for the image output unit to perform the image output operation (Honna, Fig. 1); and

data storage (memory 107) for storing the resource file (Honna Fig. 1).

Regarding **claim 6**, Honna discloses all of the limitations of the parent claim. Additionally, Honna discloses

the request command is generated in response to the image output instruction (Honna, Fig.1 and column 10 line 12-25, wherein printer drive is used);

Regarding **claim 7**, same ground of rejection as in claim 4 is applied.

Regarding **claim 9**, same ground of rejection as in claim 6 is applied.

Regarding **claim 10**, Honna discloses an image output unit (Honna, Fig. 1) comprising:

request command reception means (interface 118 and cpu 124) for receiving a request command for requesting the image output unit to perform

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image output operation based on predetermine output condition setting through the communication interface from said image source unit (Honna, Fig.1 and column 10 line 12-25, wherein print commands are received);

resource file acquisition means (interface 118 and cpu 124) for acquiring a resource file used for the image output unit to perform the image output operation through the communication interface from the image source unit (Honna, Fig.1 and column 10 line 12-25, wherein printer 102 receives image data);

control means (cpu124) for controlling the image output operation based on the received request file and the acquired resource file (Honna, Fig.1).

Regarding **claim 11**, same ground of rejection as in claim 10 is applied.

Regarding **claim 15**, Honna discloses a slave unit being connected to a master unit through a communication interface, comprising:

request command generation means for generating a request command for requesting the master unit to perform predetermined operation based on predetermined operation condition setting (Honna, Fig.1 and column 10 line 12-25, wherein printer drive is used);

and request command transmission means for transmitting the request command to the master unit through the communication interface in response to an inquiry issued from the master unit (Honna, Fig.1 and column 10 line 12-25, wherein printer driver is used for necessary command for print instruction).

Regarding **claim 16**, Honna discloses all of the limitations of the parent claim. Additionally, Honna discloses

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resource file creation means (cpu 117) for creating a resource file used for the master unit to perform the predetermined operation (Honna, Fig. 1);

data storage (memory 107) for storing the created resource file (Honna Fig. 1); and resource file transmission means for transmitting the resource file to the master unit through the communication interface in response to a request issued from the master unit.

Regarding **claim 17**, Honna discloses all of the limitations of the parent claim. Additionally, Honna discloses

an operation unit (interface 111) for issuing an operation instruction, wherein the request command is generated in response to the operation instruction (Honna, Fig.1 and column 10 line 12-25, wherein user interface 11 inputs a print instruction and printer driver is used).

Claims 23, 30-33, and 35 are rejected under 35 U.S.C. 102 (e) as being anticipated by Watanabe (US 7,310,112).

Regarding **claim 23**, Watanabe discloses

periodically transmitting an inquiry command for checking whether or not a request command for requesting the master unit to perform predetermined operation based on predetermined operation condition setting is generated in the slave unit through the communication interface to the slave unit (Watanabe, Fig. 2, wherein polling signal is sent from master unit);

when it is checked that the request command is generated, receiving the request command through the communication interface from the slave unit

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(Watanabe, Fig. 2, wherein semi-stop state information command is received);

and

controlling the predetermined operation based on the received request file (Watanabe, Fig. 2, wherein master unit control slave unit for imaging processing).

Regarding **claim 30**, Watanabe discloses all of the limitations of the parent claim. Additionally, Watanabe discloses

the slave unit includes a digital camera (electronic camera) (Watanabe, Fig.2) and the master unit includes a digital printer (printer attached to home server 2), (Watanabe, Fig. 4).

Regarding **claim 31**, Watanabe discloses all of the limitations of the parent claim. Additionally, Watanabe discloses

the inquiry command is periodically transmitted from a USB host controller in the master unit, (Watanabe, Fig. 2, wherein polling signal is sent from master unit);

when the inquiry command is received, if the request command is generated, a storage class USB device controller in the slave unit transmits the request command (Watanabe, Fig. 2, wherein semi-stop state notification command is transmitted).

Regarding **claim 32**, Watanabe discloses all of the limitations of the parent claim. Additionally, Watanabe discloses

the generated request command is stored in data storage in a predetermined file format by a storage class USB device controller (Watanabe,

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Fig. 2, wherein slave camera generates semi-stop state notification command),
said method further comprising the step of:

periodically controlling the slave unit by a USB host controller so as to
check whether or not the read request command is stored in the data storage
(Watanabe, Fig. 2, wherein polling signal is sent from master unit).

Regarding **claim 33**, Watanabe discloses all of the limitations of the
parent claim. Additionally, Watanabe discloses

the operation condition setting is described in either the request command
or the resource file (Watanabe, Fig. 2, wherein slave camera generates semi-
stop state notification command)

Regarding **claim 35**, Watanabe discloses all of the limitations of the
parent claim. Additionally, Watanabe discloses

the received file is acquired at the timing dependent on the condition of the
master (Watanabe, Fig. 2, wherein “semi-stop state notification” file is dependent
on the continuous polling from the master unit).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for
all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described
as set forth in section 102 of this title, if the differences between the subject matter sought to
be patented and the prior art are such that the subject matter as a whole would have been
obvious at the time the invention was made to a person having ordinary skill in the art to which
said subject matter pertains. Patentability shall not be negated by the manner in which the
invention was made.

**Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable
over Inoue (6,273,535 to Inoue et al) in view of Honna (US 6,304,313).**

Regarding **claim 1**, Inoue discloses an image output system (Inoue, Fig. 1, Fig. 13) comprising:

- an image source unit (Inoue, Fig. 1, Fig. 13, digital camera 1);
- an image output unit (Inoue, Fig. 1, Fig. 13, printer 2); and
- a communication interface (3) for connecting said image source unit and said image output unit (Inoue, Fig. 1 and column 4 lines 41-42, wherein USB is used to connect the digital camera and the printer),

- said image source unit (digital camera 1) having:
 - data storage (image memory 5) for storing a resource file used for said image output unit to perform the image output operation (Inoue, Fig. 1, Fig. 13,); and

- slave communication means (103) for accessing the resource file in the data storage as controlled in a slave manner by said image output unit (Inoue, Fig. 13 and column 4 lines 35-39, wherein printer 2 reads image data and additional image information using slave communication unit 103), and

- said image output unit having:
 - resource file acquisition means (communication 8 and controller 201) for acquiring the resource file through said communication interface from said image source unit by controlling the slave communication means (Inoue, Fig. 13 and column 4 lines 35-39, wherein communication unit 8 and controller 2 read image data and additional image information using slave communication unit 103); and

control means (controller 201) for controlling the image output operation based on the received request file and the acquired resource file (Inoue, Fig. 13, wherein read image data and additional image information are output).

However, Inoue does not disclose

an operation unit for issuing an image output instruction;

request command generation means being responsive to the image output instruction for generating a request command for requesting said image output unit to perform image output operation based on predetermined output condition setting;

request command transmission means for transmitting the request command through said communication interface to said image output unit;

request command reception means for receiving the request command through said communication interface from said image source unit.

On the other hand, Honna discloses

an operation unit (user interface 111) for issuing an image output instruction (Honna, Fig.1 and column 10 line 12-25, wherein user interface 11 inputs a print instruction);

request command generation means (printer driver 115) being responsive to the image output instruction for generating a request command for requesting said image output unit to perform image output operation based on predetermined output condition setting (Honna, Fig.1 and column 10 line 12-25, wherein printer driver is used);

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request command transmission means (printer driver 115) for transmitting the request command through said communication interface to said image output unit (Honna, Fig.1 and column 10 line 12-25, wherein printer driver is used for necessary command for print instruction);

request command reception means (interface 118 and cpu 124) for receiving the request command through said communication interface from said image source unit (Honna, Fig.1 and column 10 line 12-25, wherein print commands are received).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the user interface, printer driver, and printer interface between a camera and a printer as described by Honna into the image output system as described by Inoue such that the digital camera is able to input a print instruction because such incorporation provides the image output system with a digital camera that can correct image distortion (Honna, column 2 lines 48-51).

Regarding **claim 2**, Inoue discloses an image output system (Inoue, Fig. 1, Fig. 13) comprising:

an image source unit (Inoue, Fig. 1, Fig. 13, digital camera 1);

an image output unit (Inoue, Fig.1, Fig. 13, printer 2); and

a communication interface (3) for connecting said image source unit and said image output unit (Inoue, Fig. 1 and column 4 lines 41-42, wherein USB is used to connect the digital camera and the printer),

said image source unit (digital camera 1) having:

resource file creation means (controller 101) for creating a resource file used for said image output unit to perform the image output operation (Inoue, Fig. 1, Fig. 13); and

said image output unit having:

resource file acquisition means (communication 8 and controller 201) for acquiring the resource file through said communication interface from said image source unit by controlling the slave communication means (Inoue, Fig. 13 and column 4 lines 35-39, wherein communication unit 8 and controller 2 read image data and additional image information using slave communication unit 103); and

control means (controller 201) for controlling the image output operation based on the received request file and the acquired resource file (Inoue, Fig. 13, wherein read image data and additional image information are output).

However, Inoue does not disclose

request command generation means for generating a request command for requesting said image output unit to perform image output operation based on predetermined output condition setting;

request command reception means for receiving the request command through said communication interface from said image source unit.

On the other hand, Honna discloses

request command generation means (printer driver 115) for generating a request command for requesting said image output unit to perform image

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output operation based on predetermined output condition setting (Honna, Fig.1 and column 10 line 12-25, wherein printer drive is used);

request command reception means (interface 118 and cpu 124) for receiving the request command through said communication interface from said image source unit (Honna, Fig.1 and column 10 line 12-25, wherein print commands are received).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the user interface, printer driver, and printer interface between a camera and a printer as described by Honna into the image output system as described by Inoue such that the digital camera is able to input a print instruction because such incorporation provides the image output system with a digital camera that can correct image distortion (Honna, column 2 lines 48-51).

Regarding **claim 3**, same ground of rejection as in claim 2 is applied.

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (6,273,535 to Inoue et al) in view of Honna (US 6,304,313) and further in view of Watanabe (US 7,310,112).

Regarding **claim 12**, Inoue discloses an image output system (Inoue, Fig. 1, Fig. 13) comprising:

master unit (Inoue, Fig.1, Fig. 13, printer 2);

slave unit (Inoue, Fig. 1, Fig. 13, digital camera 1);

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a communication interface (3) for connecting said master unit and slave unit (Inoue, Fig. 1 and column 4 lines 41-42, wherein USB is used to connect the digital camera and the printer),

said master unit (printer 2) having:

control means (controller 201) for controlling the predetermined operation based on the received request file (Inoue, Fig. 13, wherein read image data and additional image information are output).

However, Inoue does not disclose

said slave unit having request command generation means for generating a request command for requesting said master unit to perform predetermined operation based on predetermined operation condition setting;

said slave unit having request command transmission means for transmitting the request command through said communication interface to said master unit if the request command is generated when the inquiry command is received;

request command reception means for receiving the request command through said communication interface from said slave unit.

On the other hand, Honna discloses

said slave unit having request command generation means for generating a request command for requesting said master unit to perform predetermined operation based on predetermined operation condition setting (Honna, Fig.1 and column 10 line 12-25, wherein printer drive is used);

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said slave unit having request command transmission means for transmitting the request command through said communication interface to said master unit if the request command is generated when the inquiry command is received (Honna, Fig.1 and column 10 line 12-25, wherein printer driver is used for necessary command for print instruction);

request command reception means for receiving the request command through said communication interface from said slave unit (Honna, Fig.1 and column 10 line 12-25, wherein print commands are received).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the user interface, printer driver, and printer interface between a camera (as slave) and a printer (as master) as described by Honna into the image output system as described by Inoue such that the digital camera is able to input a print instruction because such incorporation provides the image output system with a digital camera that can correct image distortion (Honna, column 2 lines 48-51).

However, Inoue and Honna do not disclose

said master unit having inquiry command transmission means for periodically transmitting an inquiry command through said communication interface to said slave unit.

On the other hand, Watanabe discloses

said master unit (master unit) having inquiry command transmission means for periodically transmitting an inquiry command through said

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communication interface to said slave unit (camera),(Watanabe, Fig. 2, wherein polling signal is sent from the master unit to the camera).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the polling signal as described by Watanabe into the data communication system as described by Inoue and Honna so as to send inquiry command to the digital camera because such incorporation updates status of the camera to the master unit and eliminates waiting time between commands, thus resulting in printing efficiency.

Regarding **claim 13**, same ground of rejection as in claim 12 is applied.

Regarding **claim 14**, Inoue, Honna, and Watanabe discloses all of the limitations of the parent claim. Additionally, Inoue discloses

in the slave unit, creating a resource file (controller 101) used for the master unit to perform the predetermined operation (Inoue, Fig. 1, Fig. 13);

in the slave unit, storing (memory 5) the created resource file in data storage (Inoue, Fig. 1, Fig. 13); and

in the master unit, acquiring the resource file through the communication interface from the slave unit (8 and 201), wherein the predetermined operation is controlled based on the received request file and the acquired resource file (Inoue, Fig. 13 and column 4 lines 35-39, wherein communication unit 8 and controller 2 read image data and additional image information using slave communication unit 103).

Claims 5, 8, 18-20, 25, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honna (US 6,304,313) in view of Inoue (6,273,535 to Inoue et al).

Regarding **claim 5**, Honna discloses all of the limitations of the parent claim. Additionally, Honna discloses

the request command is transmitted to the image output unit through the communication interface in response to an inquiry issued from the image output unit (Honna, Fig.1 and column 10 line 12-25, wherein printer driver is used for necessary command for print instruction when interface is established).

However, Honna does not disclose

the resource file is transmitted to the image output unit through the communication interface in response to a request issued from the image output unit.

On the other hand, Inoue discloses

the resource file is transmitted to the image output unit through the communication interface in response to a request issued from the image output unit (Inoue, Fig. 13 and column 4 lines 35-39, wherein communication unit 8 and controller 2 read image data and additional image information using slave communication unit 103).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the resource file transmission as described by Inoue into the image source unit as described by Honna such the resource file is transmitted to a printer because such

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incorporation provides the image output system with a digital camera that can efficiently create image data, thus eliminating extra processing and quickly output an image with higher quality (Inoue, column 1 lines 22-45).

Regarding **claim 8**, same ground of rejection as in claim 5 is applied.

Regarding **claim 18**, Honna discloses an information processing method executed in a slave unit being connected to a master unit through a communication interface, said method comprising steps of:

generating a request command for requesting the master unit to perform predetermined operation based on predetermined operation condition setting (Honna, Fig.1 and column 10 line 12-25, wherein printer driver is used); and

transmitting the request command to the master unit through the communication interface in response to an inquiry issued from the master unit (Honna, Fig.1 and column 10 line 12-25, wherein printer driver is used for necessary command for print instruction).

However, Honna does not disclose
a slave unit.

On the other hand, Inoue discloses

a slave unit (camera 1), (Inoue, Fig. 13 and column 4 lines 35-39, wherein printer 2 reads image data and additional image information from camera 1 using slave communication unit 103)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of slave camera as described by Inoue into the information processing method as described by

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Honna such that the command request is produced by the slave camera because such incorporation provides the information processing method with a camera that can efficiently create image data, thus eliminating extra processing and quickly output an image with higher quality (Inoue, column 1 lines 22-45).

Regarding **claim 19**, Honna and Inoue disclose all of the limitations of the parent claim. Additionally, Inoue discloses

creating a resource file (controller 101) used for the master unit to perform the predetermined operation (Inoue, Fig. 1, Fig. 13);
storing (memory 5) the created resource file in data storage (Inoue, Fig. 1, Fig. 13); and

transmitting the resource file to the master unit through the communication interface in response to a request issued from the master unit (Inoue, Fig. 13 and column 4 lines 35-39, wherein communication unit 8 and controller 2 read image data and additional image information using slave communication unit 103).

Regarding **claim 20**, Honna and Inoue disclose all of the limitations of the parent claim. Additionally, Honna discloses

issuing an operation instruction as an operation unit is operated, wherein the request command is generated in response to the operation instruction (Honna, Fig.1 and column 10 line 12-25, wherein user interface 111 inputs a print instruction and printer driver is used).

Regarding **claim 25**, Honna and Inoue disclose all of the limitations of the parent claim. Additionally, Inoue discloses

the slave unit includes a digital camera (camera 1) and the master unit includes a digital printer (printer 2).

Regarding **claim 28**, Honna and Inoue disclose all of the limitations of the parent claim. Additionally, Inoue discloses

displaying the operation condition setting on a display panel in response to the operation instruction (Inoue, Fig. 13 and Fig. 4).

Regarding **claim 29**, Honna and Inoue discloses all of the limitations of the parent claim. Additionally Inoue discloses

converting an image file in the general-purpose format into a data format dependent on the master unit (Inoue, Fig. 13, wherein controller 22 re-formats read image data for printing).

However, Honna and Inoue does not disclose
the resource file includes an image file in a general-purpose format including a JPEG format.

On the other hand, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of JPEG format are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have implemented JPEG format into the digital camera because such implementation enhances the portability of the digital camera.

Claims 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honna (US 6,304,313) in view of Watanabe (US 7,310,112).

Regarding **claim 21**, Honna discloses a master unit being connected to a slave unit through a communication interface, comprising:

request command reception means (interface 118 and cpu 124) for receiving a request command for requesting the master unit to perform predetermined operation based on predetermined operation condition setting through the communication interface from the slave unit (Honna, Fig.1 and column 10 line 12-25, wherein print commands are received); and

control means for controlling the predetermined operation based on the received request file (Inoue, Fig. 13, wherein read image data and additional image information are output).

However, Honna does not disclose

inquiry command transmission means for periodically transmitting an inquiry command through the communication interface to the slave unit.

On the other hand Watanabe discloses

inquiry command transmission means for periodically transmitting an inquiry command through the communication interface to the slave unit (camera),(Watanabe, Fig. 2, wherein polling signal is sent from the master unit to the camera).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the polling signal as described by Watanabe into the data communication system as described by Honna so as to send inquiry command to the digital camera because such

incorporation updates status of the camera to the master unit and eliminates waiting time between commands, thus resulting in printing efficiency.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honna (US 6,304,313) in view of Watanabe (US 7,310,112) and further in view of Inoue (6,273,535 to Inoue et al).

Regarding **claim 22**, Honna and Watanabe disclose all of the limitations of the parent claim.

However, Honna and Watanabe do not disclose
resource file acquisition means for acquiring a resource file used for the master unit to perform the predetermined operation through the communication interface from the slave unit, wherein

said control means controls the predetermined operation based on the received request file and the acquired resource file.

On the other hand, Inoue discloses
resource file acquisition means (communication 8 and controller 201) for acquiring a resource file used for the master unit to perform the predetermined operation through the communication interface from the slave unit (Inoue, Fig. 13 and column 4 lines 35-39, wherein communication unit 8 and controller 2 read image data and additional image information using slave communication unit 103), wherein

said control means (controller 201) controls the predetermined operation based on the received request file and the acquired resource file (Inoue, Fig. 13, wherein read image data and additional image information are output).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the resource file acquisition and control as described by Inoue into the master unit as described by Honna and Watanabe such that the resource file is received by a master unit because such incorporation provides the image output system with a digital camera that can efficiently create image data, thus eliminating extra processing and quickly output an image with higher quality (Inoue, column 1 lines 22-45).

Claim 24 and 34 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Watanabe (US 7,310,112) in view of Inoue (6,273,535 to Inoue et al).

Regarding **claim 24**, Watanabe discloses all of the limitations of the parent claim.

However, Watanabe does not disclose
acquiring a resource file used for the master unit to perform the predetermined operation through the communication interface from the slave unit (Inoue, Fig. 13 and column 4 lines 35-39, wherein communication unit 8 and controller 2 read image data and additional image information using slave communication unit 103), wherein

the predetermined operation is controlled based on the received request file and the acquired resource file (Inoue, Fig. 13, wherein read image data and additional image information are output).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the resource file acquisition

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and control as described by Inoue into the master unit as described by Watanabe such that the resource file is received by a master unit because such incorporation provides the information processing method with a digital camera that can efficiently create image data, thus eliminating extra processing and quickly output an image with higher quality (Inoue, column 1 lines 22-45).

Regarding **claim 34**, Watanabe discloses all of the limitation of the parent claim. However, Watanabe does not disclose

converting an image file in the general-purpose format into a data format dependent on the master unit.

On the other hand, Inoue discloses

converting an image file in the general-purpose format into a data format dependent on the master unit (Inoue, Fig. 13, wherein controller 22 re-formats read image data for printing).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the image file conversion as described by Inoue into the processing as described by Watanabe such that received file from digital camera is reformatted by the printer because such incorporation provides the information processing method with a digital camera that can efficiently create image data, thus eliminating extra processing and quickly output an image with higher quality (Inoue, column 1 lines 22-45).

However, Watanabe and Inoue does not disclose

the received file includes an image file in a general-purpose format including a JPEG format.

On the other hand, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of JPEG format are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have implemented JPEG format into the digital camera in the information processing system because such implementation enhances the portability of the digital camera.

Claim 26 and 27 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Honna (US 6,304,313) in view of Inoue (6,273,535 to Inoue et al) and further in view of Watanabe (US 7,310,112).

Regarding **claim 26**, Honna and Inoue disclose all of the limitations of the parent claim. Additionally, Honna discloses

when the inquiry command is received, if the request command is generated, a storage class USB device controller in the slave unit transmits the request command (Honna, Fig.1 and column 10 line 12-25, wherein printer driver is used for necessary command for print instruction).

However, Honna and Inoue do not disclose
the inquiry command is periodically transmitted from a USB host controller in the master unit, and wherein

On the other hand Watanabe discloses
the inquiry command is periodically transmitted from a USB host controller in the master unit ,(Watanabe, Fig. 2, wherein polling signal is sent from the master unit to the camera).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the polling signal as described by Watanabe into the data communication system as described by Honna and Inoue so as to send inquiry command to the digital camera because such incorporation updates status of the camera to the master unit and eliminates waiting time between commands, thus resulting in printing efficiency.

Regarding **claim 27**, Honna and Inoue disclose all of the limitations of the parent claim. Additionally, Honna discloses

storing the generated request command in data storage in a predetermined file format by a storage class USB device controller (Honna, Fig.1 and column 10 line 12-25, wherein printer driver is used for necessary command for print instruction).

However, Honna and Inoue do not disclose

a USB host controller in the master unit periodically checks whether or not the read request command is stored in the data storage.

On the other hand, Watanabe discloses

a USB host controller in the master unit periodically checks whether or not the read request command is stored in the data storage (Watanabe, Fig. 2, wherein polling signal is sent from the master unit to the camera).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the polling signal as described by Watanabe into the data communication system as described by

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Honna and Inoue so as to send inquiry command to the digital camera because such incorporation updates status of the camera to the master unit and eliminates waiting time between commands, thus resulting in printing efficiency.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Shiraiwa (US 2002/0105678) discloses a system capable of printing in a simple manner by detecting the connection of a printer and shift to a print mode, comprising camera and printer.

Itsukaichi (US 2001/0004266) discloses a system wherein digital camera functions as a slave device unit.

Tamura et al (US 6,806,978) discloses a printer which is attachable/detachable to/from an image pickup apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUAN H. LE whose telephone number is (571)270-1130. The examiner can normally be reached on M-Th 7:30-5:00 F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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